AMENDMENTS

Please amend the claims as follows:

1.   (currently amended) A method for representing flow with a medical imaging system, the method comprising:

        (a)   determining a rate of change of a parameter as a function of a difference in time between first and second images associated with different times, the first and second images representing a scanned region of a patient;

        (b)   calculating a positional change in the parameter between the first and second images associated with different times, the positional change being displayed as a function the rate of change and being a function of the difference in time; and

        (c)   displaying the change in the parameter in the second image.

2.   (previously presented) The method of Claim 1 wherein (a) comprises:

        (a1)   determining flow direction and magnitude; and

        (a2)   determining the rate of change as a function of the flow direction and magnitude;

        wherein (c) comprises displaying the change as a perceived motion of a pixel.

3.   (previously presented) The method of Claim 1 wherein (c) comprises displaying a pattern for a plurality of pixel locations, the pattern varying as function of the rate of change.

4.   (original) The method of Claim 1 wherein (a) comprises determining the rate of change as proportional to motion for pixels associated with flow.

5.   (previously presented) A method for representing flow with a medical imaging system, the method comprising:

        (a)   assigning first display values to each of a first plurality of spatial locations of a first image;

        (b)   tracking a flow direction and magnitude for each of the first plurality of spatial locations;

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(c)   identifying a second plurality of spatial locations as a function of the flow directions and magnitudes, the second plurality of spatial locations corresponding to locations in a second image; and

(d)   assigning second display values of the second image to each of the second plurality of spatial locations as a function of the first display values of the first image such that the second display values have a perceived similarity to the first display values but shifted spatially between the first and second images.

6.   (original) The method of Claim 5 wherein (a) comprises generating a first pattern for the first plurality of spatial locations for a first image, the first plurality of spatial locations associated with flow, and (d) comprises generating a second pattern for the second plurality of spatial locations for a second image, the second plurality of spatial locations associated with flow, each of the second plurality of spatial locations of the second pattern responsive to the first pattern shifted by the flow direction and magnitude for each of first plurality of spatial locations.

7.   (original) The method of Claim 5 wherein (a) comprises assigning as a function of a random field with a normal distribution.

8.   (previously presented) The method of Claim 5 wherein (a) and (d) comprise assigning at least one characteristic of the first and second display values as modulated gray scale values, color, hue or combinations thereof.

9.   (previously presented) The method of Claim 8 further comprising:

(e)   modulating the first and second display values also as a function of B-mode signals, color flow signals, or combinations thereof.

10.   (original) The method of Claim 5 wherein (d) comprises assigning the second display values as a weighted combination of the first display values and a pattern function.

11.   (currently amended) A method for representing flow with a medical imaging system, the method comprising:

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(a)   generating a first pattern for a plurality of pixels associated with flow for a first image;

(b)   determining a spatial offset between the first image and a second image as a function of the flow;~~and~~

(c)   generating a second pattern for the pixels associated with flow for the second image, the second pattern determined as a function of the first pattern, the second pattern being positioned in the second image as a function of the spatial offset; and

<u>(d)   determining a flow direction and magnitude for each of the plurality of pixels;</u>

<u>wherein (c) comprises generating the second pattern as a function of the flow direction and magnitude.</u>

12.   (original) The method of Claim 11 wherein (a) comprises generating the first pattern with a normal distribution with a width of the distribution being a function of a variance of flow.

13.   (original) The method of Claim 11 wherein (a) comprises modulating gray scale values of pixel display values for the plurality of pixels.

14.   (previously presented) The method of Claim 13 further comprising:

(d)   modulating a color of the pixel display values for the plurality of pixels as a function of a flow characteristic.

15.   (previously presented) The method of Claim 13 further comprising:

(d)   modulating the gray scale pixel display values also as a function of B-mode signals for the plurality of pixels.

16.   (previously presented) The method of Claim 11 wherein (c) comprises generating the second pattern as representing movement of the first pattern.

17.   (cancelled)

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18.   (previously presented) The method of Claim 11 wherein (a) and (c) comprise indicating a direction of flow with a shift of the first pattern to a different position, the second pattern including information from the shifted first pattern.

19.   (previously presented) The method of Claim 11 wherein (a) and (c) comprise indicating a magnitude of flow with a shift of the first pattern to a different position, the second pattern including information from the shifted first pattern.

20.   (currently amended) A system for representing flow in medical imaging, the system comprising:

a processor operable to generate an at least partially persistent pattern in each of at least two images representing a region of a patient, the persistent pattern shifted, in a second of the images as compared to a first of the images, as a function of flow direction, flow magnitude or combinations thereof in the first of the images, the processor operable to calculate a second pattern in the second of the images as a function of a first pattern in the first of images; and

a display operable to display the at least two images.

21.   (previously presented) The system of Claim 20 wherein the processor is operable to assign the first pattern to each of a first plurality of spatial locations in the first of the at least two images, to track a flow direction and magnitude for each of the first plurality of spatial locations, to identify a second plurality of spatial locations as a function of the flow direction and magnitude, and to assign second display values to each of the second plurality of spatial locations in the second of the at least two images as a function of the first display values.

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